## Quarterly Activities Report 31 March 2019



- Drill planning underway to test IP anomaly targets detected along strike of known base metal sulphide Cu-Zn-Ag-Au mineralisation at the Eastman and Landrigan prospects:
  - Eastman West where IP anomalies provide an immediate "walk-up" drilling opportunity
  - Landrigan where new IP targets located to the east and west of existing drillholes coincide with anomalous end of hole geochemistry from historical shallow drilling
- Appointment of Dr Darryl Clark as technical director

#### **PROJECTS**

#### **East Kimberley Copper Projects**

Peako's primary focus is copper exploration in the East Kimberley Region of Western Australia where it has a granted tenement package of more than 500 km<sup>2</sup>.

Peako's East Kimberley tenements are largely located on Louisa Downs Station, 120 km to the southwest of Halls Creek. Access to the tenements is via the Great Northern Highway and station tracks (Figure 1).

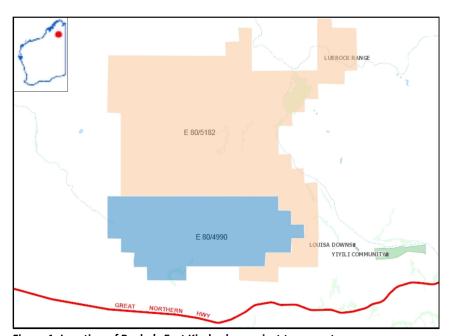


Figure 1. Location of Peako's East Kimberley project tenements

Historical exploration in both tenements has been primarily guided by surface gossans and geochemical anomalies. Only the more significant geochemical anomalies have been tested by limited shallow drilling, with an advanced VMS deposit identified at the Eastman Prospect. Previous exploration in the Wirana tenement has been sparse and sporadic, with a small number of explorers having pursued a wide range of mineralisation styles for different commodities over a large area.

Wide-spaced and generally shallow drill intercepts of anomalous gold and base metal mineralisation have been identified, but not effectively followed up in either project tenement.

Peako has identified Induced Polarisation (IP) geophysical-anomalies along strike of known base metal mineralisation which it is preparing to drill-test.

#### **Drillhole Planning**

Drillholes have been designed at both the Eastman and Landrigan prospect areas to test those anomalous IP responses identified within the Eastman Project which are not explained by existing drilling (Figures 9 and 10). During the quarter Peako made application to the Western Australian Department of Mines, Industry Regulation and Safety (DMIRS) for Programme of Work approval for its planned drilling program.

The planned drillholes, based on Peako's updated interpretation, following the IP survey conducted in late 2018, are significantly different from the drilling Peako proposed in its successful co-funded drilling application (EIS grant DAG2018/01256022)<sup>1</sup>. The drilling Peako had previously proposed in that application is no longer considered an optimal test of the exploration target and Peako has therefore declined the EIS grant, but will apply again in future EIS rounds.

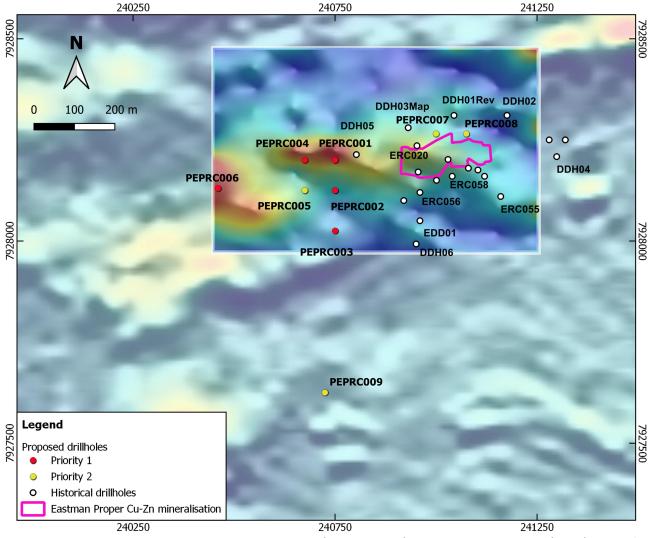


Figure 2. Eastman Prospect proposed drillhole collar locations (red and yellow), historical drillhole, collars (white), and surface projection outline of known Eastman mineralisation (purple), all overlain on an image of GAIP chargeability over magnetic image anomaly pattern.

<sup>&</sup>lt;sup>1</sup> Refer ASX announcement 18 June 2018

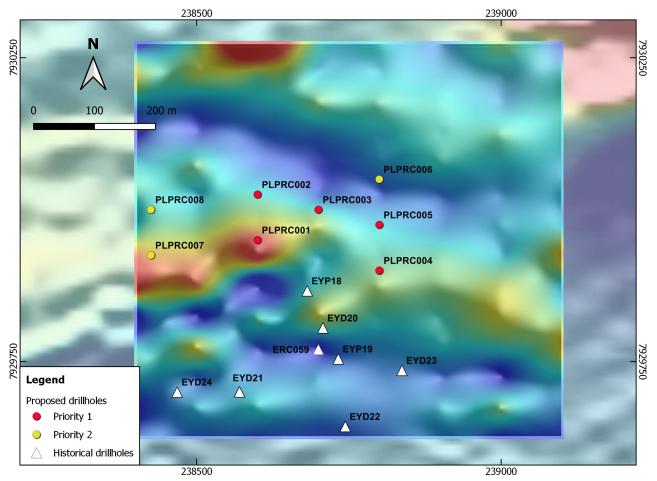


Figure 3. Landrigan Prospect proposed drillhole collar locations (red and yellow), historical drillhole collars (white) all overlain on an image of GAIP chargeability over magnetic image anomaly pattern.

#### **IP Survey Design**

In September 2018 Peako commissioned an Induced Polarisation (IP) survey program consisting of one survey block of Gradient Array IP (GAIP) and two traverses of Dipole-Dipole IP (DDIP) at the Eastman Prospect, where there is known Cu-Zn mineralisation (Eastman Proper), and one survey block of GAIP and one DDIP traverse at the Landrigan Prospect, defined by historic drillhole intersections, including 9.6m at 2.7% Cu, 1.5% Zn, 0.3% Pb, 12.6 g/t Ag and 1.5 g/t Au2 (see Figures 2, 3 and 6).

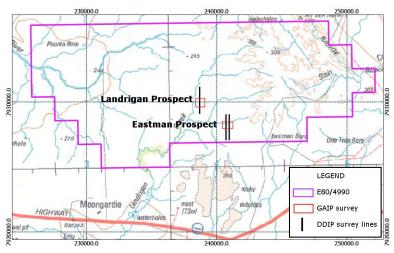


Figure 4. Eastman tenement over 1:250,000 topography map showing location of GAIP surveys and DDIP survey lines.

<sup>&</sup>lt;sup>2</sup> Refer to Peako's ASX Announcement 15 August 2018

The GAIP survey areas and DDIP traverses provided a test of whether or not the known base metal sulphide mineralisation occurring at the Eastman and Landrigan prospects would provide an IP chargeability anomaly response, and to detect any IP anomalies that could indicate possible extensions to known mineralisation for drill targeting. The networked GAIP recordings allowed for multiple electrode and station spacing data to be recorded at the same time (50m, 100m, 150m and 200m), and the high transmitter power allowed for detection of weakly chargeable Zn-rich mineralised zones.

#### Eastman Prospect IP Survey Results<sup>3</sup>

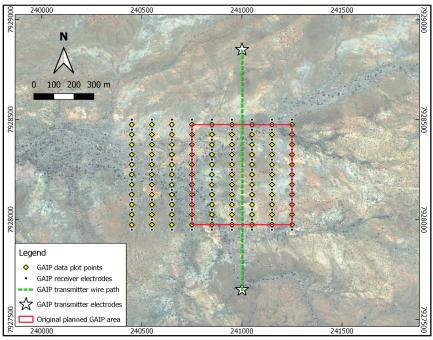


Figure 5. Completed GAIP survey layout at Eastman Prospect over an IKONOS orthophoto image.

A GAIP and DDIP chargeability anomaly high, with approximate maximum amplitude of 5.6 msec, is closely correlated with the shallow Cu-Zn sulphide mineralisation at the Eastman Prospect, thereby confirming that the IP survey method successfully detected known mineralisation. A discrete and subtle resistivity anomaly high agrees with a previous description of a resistive silica cap occurring at the top of the Eastman gossan.

A well pronounced GAIP chargeability anomaly high of 6.5 msec is located along strike to the west of known Eastman mineralisation, and this feature has been named "Eastman West". The Eastman West GAIP anomaly has not been tested by existing drilling. A follow-up DDIP traverse over this GAIP anomaly confirmed its source is likely to be shallow, and also provides an additional IP chargeability target response extending down dip to the south of the GAIP anomaly response.

<sup>&</sup>lt;sup>3</sup> Refer to Peako's ASX Announcement 31 October 2018 and 28 November 2018

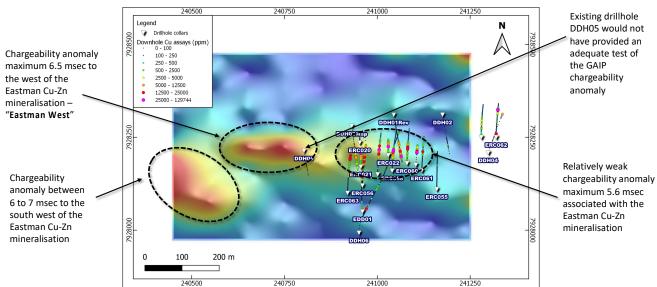


Figure 6. Eastman Prospect GAIP survey results – chargeability. *Image courtesy of Resource Potentials Pty Ltd* (for details of historical drilling refer to the Company's ASX Announcement dated 15 August 2018).

The Eastman West IP anomaly zone may form a westerly plunge extension of Eastman mineralisation. Historical drillhole DDH05 was close to testing the Eastman West GAIP chargeability anomaly, but this drillhole was drilled parallel to the dip of the IP anomaly, and had very poor recoveries. As a result, it was not assayed.

The Eastman West IP anomaly responses provide a direct base metal target zone in close proximity to, and along strike of, the known Eastman Cu-Zn mineralisation. New deep drilling is required to determine the source of the Eastman West GAIP and DDIP chargeability anomalies.

As the survey progressed, the Eastman Prospect GAIP survey area was extended to the west by an additional 300m (3 survey lines) to obtain more data over an anomalous chargeability response on the SW corner of the original planned survey area (Figure 5). This GAIP anomaly continued to grow (Figure 6) and is still not closed off, as the GAIP survey grid could not be extended further, because of anticipated poorer quality data on wider GAIP survey grids, and due to time and budget constraints.

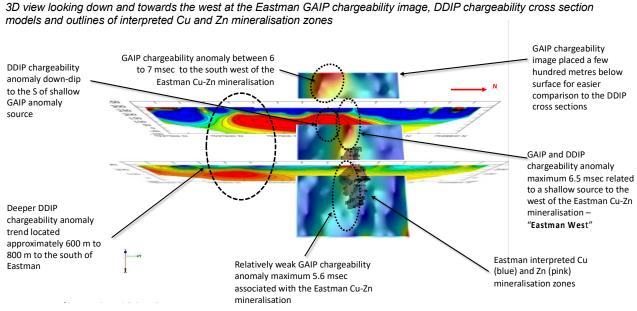


Figure 7. Eastman Prospect 3D view of IP chargeability results. Image courtesy of Resource Potentials Pty Ltd.

#### **Landrigan Prospect IP Survey Results**

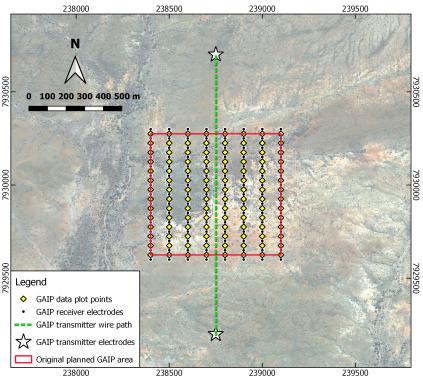


Figure 8. Completed GAIP survey layout at Landrigan Prospect over an IKONOS orthophoto image.

At the Landrigan Prospect, GAIP and DDIP chargeability anomaly highs appear to be closely correlated with elevated Cu assays at the end of hole in historical RAB drilling, and a downhole intersection in diamond drillhole EYD020.

Separate GAIP chargeability anomaly trends located to the east and west of existing drillholes at Landrigan provide direct targets for drill testing to potentially expand the base metal mineralised zone, and to better understand the local geology and structural influences on base metal mineralisation at this prospect area, which do not appear to be well understood from historical exploration work to fit into a mineralisation style, such as VMS, sedimentary replacement, etc. (Figure 7).

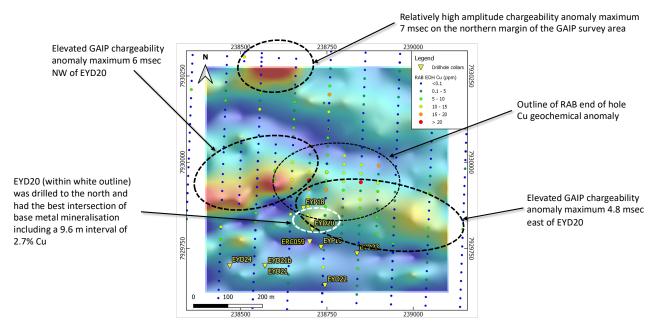


Figure 9. Landrigan Prospect GAIP survey results – chargeability *Image courtesy of Resource Potentials Pty Ltd* (For details of historical drilling refer to the Company's ASX Announcement dated 15 August 2018).

Interpretation of historical exploration work at the Landrigan Prospect projected the mineralised sulphide zone as a south dipping source for the bedrock Cu-Pb-Zn geochemical anomalism. However, the recent GAIP chargeability response from multiple receiver spacings, and a single DDIP survey line suggests a northerly dipping sulphide target source, which is untested by historical drillholes (Figure 8)

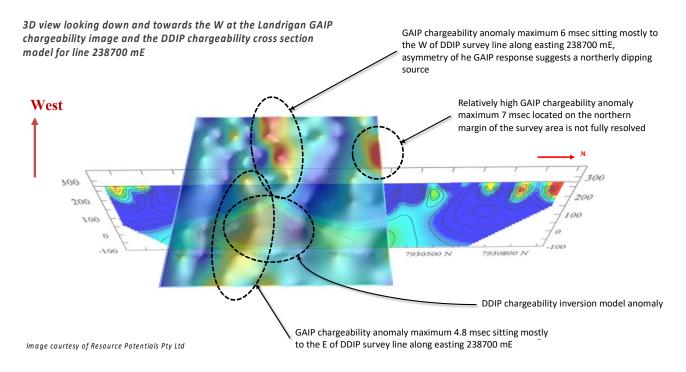


Figure 10. Landrigan Prospect 3D view of IP chargeability results. Image courtesy of Resource Potentials Pty Ltd.

#### **Future IP surveys**

The IP survey method utilising a high power transmitter and networked receiver array has proven to be an effective tool for subsurface exploration for Eastman style prospects in order to detect potential disseminated to brecciated Cu and Zn bearing sulphide bodies, and is therefore suitable for other prospects within Peako's its East Kimberley tenements, with prospective host rock geology and geochemical anomalism. Peako is carrying out further historical data compilation, integration, analysis and detailed interpretation to identify the most prospective areas and target zones within its East Kimberley tenements in order to optimise the location of future IP and other geophysical surveys.

#### **Gold Prospectivity**

In addition to being prospective for base metals mineralisation, both the Eastman and Wirana project areas have potential for gold mineralisation associated with VMS deposits, PGE reefs and quartz veins.

The geology of the areas suggests that a diverse range of Proterozoic (1850-1500Ma) "orogenic" gold deposit models could be considered; such as quartz vein-hosted, shear zone-hosted, BIF-hosted, ironstone-hosted, calc silicate-hosted, black shale-hosted, Coronation Hill Au-PGE and epithermal Au-Cu-Mo deposits.

Previous explorers have noted the potential of the tenement areas for gold deposits (eg, Geopeko and Navigator) but little appears to have been done. There has been no systematic effort directed towards exploring either project area for gold. Very minor exploration for orogenic gold deposits has been confined to the eastern end of the Eastman tenement and the north eastern end of the Wirana tenement and was not followed up, despite anomalous sample results.

A helicopter sampling survey conducted across both tenements in September 2018 included sample locations selected with a bias toward potential gold mineralisation, based on an initial desktop study of historical exploration.

Results from that rock sampling survey are being integrated with geoscientific datasets to interpret regolith and basement geology, and structures that may relate to gold mineralisation

#### **Paterson Province Projects**

Peako's Broadhurst Project tenement is located in the Rudall River area of the Paterson Province of Western Australia, known for its gold, base metals and uranium potential (Figure 11).

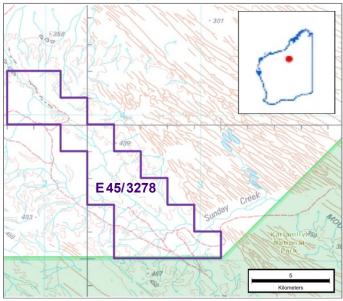


Figure 11. Broadhurst Project tenement location

Historically, the Broadhurst Project has mainly been explored for uranium mineralisation in the eastern part of the project area, with little exploration carried out for base metal mineralisation.

According to historical geological mapping, the bedrock geology of the project area is entirely made up of carbonaceous shales and siltstones of the Broadhurst Formation, and quartz sandstones and siltstones of the underlying Coolbro Sandstone Formation.

The location of Broadhurst Formation shales are shown in regional GSWA bedrock geology maps to extend along strike to the north west of Sunday Creek, where the shale units host the Metals X Nifty Cu deposit, as well as several Cu and other base metal prospects (mainly Pb-Zn) held by Encounter Resources and others (Figure 12).

Peako is using geological, geochemical and geophysical methods to identify base metal target zones for investigation. Previously acquired open-file airborne EM survey data acquired along 1km spaced east-west flight lines has been reprocessed to assist with highlighting broad scale conductivity patterns, estimating thickness of regolith and Permian Paterson Formation sedimentary cover, and estimating depth to top of conductive Broadhurst Formation shale units.

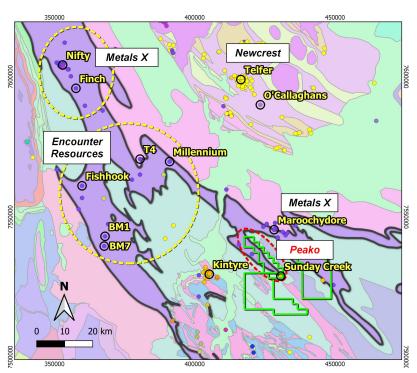


Figure 12 Broadhurst Formation (blue) with tenement outlines (green) and key mineral prospects and mines

3D inversion modelling has been carried out on a high-resolution airborne magnetic survey data set acquired by Peako in 2008. As well as potentially identifying relatively shallow pyrrhotite rich beds within the Broadhurst Formation sitting below regolith cover, the resulting magnetic inversion models can be used to assist with mapping and targetting of prospective fold and fault structures within the Broadhurst Formation for hosting sedimentary replacement style base metal mineralisation.

Peako also has three long standing applications for exploration licences located close to its Broadhurst Project tenement.

#### **Runton Project and Durack Ranges Project**

Runton Project

Peako has a 25% interest in E45/3736, located in the Pilbara region of Western Australia.

**Durack Ranges Project** 

Peako has the right to earn a 45% interest in E80/5080 following grant of the exploration licence (having been applied for in 2017), by meeting Farmin Expenditure totalling \$95,000 over a three-year period. Located 148km north of Halls Creek in the Kimberley region of Western Australia, E80/5080 is considered prospective for the discovery of diamondiferous kimberlites.

#### **CORPORATE**

Dr Darryl Clark was appointed as an independent non-executive director effective from 20 March 2019. Dr Clark brings technical exploration expertise at the highest levels, as well as experience in strategy and exploration portfolio development, important areas to Peako as the company builds its exploration projects."

Mr Peter Armitage who had served as a director since 2015 resigned with effect from 20 March 2019.

1,000,000 Options, exerciseable at \$0.05 and expiring on 20 March 2021 were granted to a nominee of Dr Clark prior to his appointment as a director.

Peako intends to conduct a pro-rata entitlements offer to shareholders during the Q2/Q3 calendar quarters of 2019 in order to fund its planned drilling program at the Eastman tenement.

Rae Clark Director

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#### Additional Information Required by Listing Rules 5.3.3 and 5.4.3

Mining Tenements held/applied for at the end of the quarter and their location

Tenement	Peako interest	Tenement status
Western Australia (East Kir	mberley Region)	
E 80/4990	60%*	Granted
E 80/5182	100%	Granted
Western Australia (Kimberl	ey Region)	
E 80/5080	45%*	Application
Western Australia (Paterson Province)		
E 45/3278	100%	Granted
E 45/3345	100%	Application
E 45/3477	100%	Application
E 45/3292	100%	Application
Western Australia (Plbara)		
E 45/3736	25%	Granted

<sup>\*</sup>Earning pursuant to farm-in agreements

Tenements acquired during the quarter and their location

Nil.

Tenements disposed of during the quarter and their location

Nil.

Beneficial percentage interests held in farm-in or farm-out agreements at the end of the Quarter:

E 80/4990 - Peako is earning a 60% interest in the tenement.

E 80/5080 - Peako to earn a 45% interest in the tenement.

+Rule 5.5

#### **Appendix 5B**

### Mining exploration entity and oil and gas exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/13, 01/09/16

# Name of entity Peako Limited ABN Quarter ended ("current quarter") 79 131 843 868 31 March 2019

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (9 months) \$A'000	
1.	Cash flows from operating activities			
1.1	Receipts from customers			
1.2	Payments for			
	(a) exploration & evaluation	(19)	(238)	
	(b) development			
	(c) production			
	(d) staff costs			
	(e) administration and corporate costs	(15)	(115)	
1.3	Dividends received (see note 3)			
1.4	Interest received			
1.5	Interest and other costs of finance paid			
1.6	Income taxes paid			
1.7	Research and development refunds			
1.8	Other (provide details if material)			
1.9	Net cash used in operating activities	(34)	(353)	

2.	Cash flows from investing activities	
2.1	Payments to acquire:	
	(a) property, plant and equipment	
	(b) tenements (see item 10)	
	(c) investments	
	(d) other non-current assets	

1 September 2016

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<sup>+</sup> See chapter 19 for defined terms

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (9 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) property, plant and equipment		
	(b) tenements (see item 10)		
	(c) investments		
	(d) other non-current assets		
2.3	Cash flows from loans to other entities		
2.4	Dividends received (see note 3)		
2.5	Other (provide details if material)		
2.6	Net cash from / (used in) investing activities		

3.	Cash flows from financing activities	
3.1	Proceeds from issues of shares	
3.2	Proceeds from issue of convertible notes	
3.3	Proceeds from exercise of share options	
3.4	Transaction costs related to issues of shares, convertible notes or options	
3.5	Proceeds from borrowings	20
3.6	Repayment of borrowings	
3.7	Transaction costs related to loans and borrowings	
3.8	Dividends paid	
3.9	Other (provide details if material)	
3.10	Net cash from / (used in) financing activities	20

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	22	191
4.2	Net cash used in operating activities (item 1.9 above)	(34)	(353)
4.3	Net cash from / (used in) investing activities (item 2.6 above)		
4.4	Net cash from / (used in) financing activities (item 3.10 above)	20	170
4.5	Effect of movement in exchange rates on cash held		
4.6	Cash and cash equivalents at end of period	8	8

<sup>+</sup> See chapter 19 for defined terms 1 September 2016

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	8	22
5.2	Call deposits		
5.3	Bank overdrafts		
5.4	Other (provide details)		
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	8	22

6.	Payments to directors of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to these parties included in item 1.2	
6.2	Aggregate amount of cash flow from loans to these parties included in item $2.3$	
6.3	Include below any explanation necessary to understand the transaction items 6.1 and 6.2	ons included in
7.	Payments to related entities of the entity and their	Current quarter
	associates	\$A'000
7.1	Aggregate amount of payments to these parties included in item 1.2	8
7.2	Aggregate amount of cash flow from loans to these parties included in item $2.3$	
7.3	Include below any explanation necessary to understand the transactic items 7.1 and 7.2	ons included in

<sup>+</sup> See chapter 19 for defined terms 1 September 2016

8.	Financing facilities available Add notes as necessary for an understanding of the position	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
8.1	Loan facilities	250	170
8.2	Credit standby arrangements		
8.3	Other (please specify)		

8.4 Include below a description of each facility above, including the lender, interest rate and whether it is secured or unsecured. If any additional facilities have been entered into or are proposed to be entered into after quarter end, include details of those facilities as well.

Line of credit facility from Australis Finance Pty Ltd, secured by floating charge, interest rate of 7%.

9.	Estimated cash outflows for next quarter	\$A'000
9.1	Exploration and evaluation	80
9.2	Development	
9.3	Production	
9.4	Staff costs	
9.5	Administration and corporate costs	30
9.6	Other – proceeds from rights issue	(500)
9.7	Total estimated net cash inflow	(390)

10.	Changes in tenements (items 2.1(b) and 2.2(b) above)	Tenement reference and location	Nature of interest	Interest at beginning of quarter	Interest at end of quarter
10.1	Interests in mining tenements and petroleum tenements lapsed, relinquished or reduced		See Activity Report		
10.2	Interests in mining tenements and petroleum tenements acquired or increased		See Activity Report		

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<sup>+</sup> See chapter 19 for defined terms

#### **Compliance statement**

1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.

2 This statement gives a true and fair view of the matters disclosed.

Sign here: Date: 30 April 2019

(Company Secretary)

Print name: R.J. WRIGHT

#### **Notes**

- 1. The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity that wishes to disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.
- 2. If this quarterly report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
- 3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.

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<sup>+</sup> See chapter 19 for defined terms